

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 05-291621

(43)Date of publication of application : 05.11.1993

(51)Int.Cl. H01L 33/00

(21)Application number : 04-118227 (71)Applicant : NICHIA CHEM IND LTD

(22)Date of filing : 10.04.1992 (72)Inventor : SENOO MASAYUKI
NAKAMURA SHUJI

(54) ELECTRODE MATERIAL OF GALLIUM NITRIDE COMPOUND SEMICONDUCTOR

(57)Abstract:

PURPOSE: To materialize a light emitting device, wherein driving voltage is lowered and brightness is raised, making use of a gallium nitride compound semiconductor, by getting the ohmic contact from a p-type layer and an n-type layer.

CONSTITUTION: At least one kind of metal being selected from the group consisting of Au, Pt, Ag, and Ni or their alloy is used for $\text{GaXAl}_{1-X}\text{N}$ (but, $0 \leq X \leq 1$) doped with p-type impurities, and at least one kind of metal being selected from the group consisting of Al, Cr, Ti, and In or their alloy is used for $\text{GaXAl}_{1-X}\text{N}$ doped with n-type impurities.

